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AEROS Overview. Update Number 2

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16. ABSTRACT This report is designed to update the AEROS Manual Series Volume I by the replacement of certain pages with those contained within the report.		
17. KEY WORDS AND DOCUMENT ANALYSIS		
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NATIONAL AIR DATA BRANCH	CHAPTER Update Notices	DATE 9/8/80	PAGE 3	
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This Update Notice concerns the enclosed replacement pages for Volume I of the AEROS MANUAL SERIES. Please remove and insert pages as listed below.

REMOVE	INSERT	COMMENTS
1.	0.2.0-3	Update Notice I-1.*
2. 3.1.1-1 to 3.1.1-2	3.1.1-1 to 3.1.1-2	Point source definition according to requirements.**
3. 4.2.1-1	4.2.1-1	New reporting regulations.
4. 4.2.2-1	4.2.2-1	Reporting regulations for annual SIP reports.**
5. 4.4.1-3	4.4.1-3	New OPS responsibilities.**

UPDATE SUMMARY

<u>Number</u>	<u>Date</u>
I-2	9/8/80

*When you have made the changes indicated in this Notice, date and initial the Notice and insert it in Chapter 0.2 of Volume I as a record of the Updates received and filed.

**This information was in either Interim Update Number 1 or Interim Update Number 2. If you did not receive a copy of those Updates, please follow directions as indicated for Update Number 2.

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The major systems which comprise AEROS are NEDS (National Emissions Data System) and SAROAD (Storage and Retrieval of Aerometric Data). NEDS deals with source and emissions information, whereas SAROAD deals with ambient air quality. An overview of these systems follows.

NEDS

The National Emissions Data System is a computerized data handling system which accepts, stores, and reports on information relating to sources of any of the five criteria pollutants (particulates, SO_x, NO_x, CO, and hydrocarbons). In NEDS, a major distinction is made between two types of sources: point sources and area sources. Point sources, in the broadest sense, are stationary sources large enough to be identified and tracked individually; although, per NEDS reporting requirements, they are any plants with actual emissions of more than 100 tons/year of any of the criteria pollutants. Area sources, on the other hand, are those stationary and mobile sources which individually emit much less than 100 tons/year and are too small and too numerous to keep individual records on. In NEDS, area sources are considered collectively on a county basis. A large boiler within a power plant would be an example of a point source, whereas, a single automobile is an example of the type of source considered collectively as an area source.

In NEDS, all source-related data are entered into the system via specially formed point and area source coding forms and are stored in separate point and area source files. The type of data stored in the system for point and area sources is somewhat different and is described below.

Point Source Data

General source information - Name, address, types of source,

3.1.1-1

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year of record, comments, etc.

Emissions data - Operating or production rate, estimated emissions, EPA calculated emissions, control device type and efficiency on each criteria pollutant, etc.

Modeling parameters - UTM coordinates of source, stack height, and diameter, exhaust gas temperature, and flow rate.

Compliance information - Allowable emissions, applicable control regulations, compliance status, and schedules, etc.

Area Source Data

General source information - Name and location of area (county) source, population, year of record.

Activity levels - Countywide activity level of each type of area source (e.g., tons of coal burned in all domestic space heating equipment in a county).

Emissions data - Emission estimates for the entire county (for each pollutant) as well as for each area source category.

Currently in NEDS, information is being maintained on approximately 175,000 point sources and about 3,200 area (county) sources in the 55 States and territories of the United States. The point source total will fluctuate as additional sources are reported, new sources come into operation, or old sources cease operations, whereas the number of area sources is fixed by the number of counties.

The information contained in these files changes too. As plants add to, modify, or change the operation of their equipment, utilize different fuels, etc., the point source data must continuously be updated to reflect

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The quarterly reports are, in effect, the air quality data and site descriptions (if necessary) for monitoring sites. The data may be sent in more frequently than quarterly if desired, but must be submitted to the Regional Offices in SAROAD format on either coding forms, punched cards, or magnetic tape.

Data for all operational sites beginning with those used in plan preparation must be submitted. Quarterly reports must be submitted within 45 days after the end of each reporting period (March 31, June 30, October 31, and December 31).

As a result of revisions in monitoring and reporting regulations, State operated monitoring networks have been divided into three groups: (1) National Air Monitoring Sites (NAMS), (2) State and Local Air Monitoring Sites (SLAMS), and (3) Special Purpose Monitoring Sites. Beginning with data collected after January 1, 1981, the State quarterly reporting requirements are changed as follows:

- (1) Raw data from the NAMS portion of the network must be reported to NADB within 90 days after the end of each reporting period.
- (2) Raw data from the SLAMS portion of the network does not require submission to NADB for update. The SLAMS Report (yearly summary statistics) must be submitted by July 1 for the raw data collected the previous year. The first SLAMS Report will summarize data for 1981 and must be submitted by July 1, 1982.
- (3) No reporting requirements exist for Special Purpose Monitoring Sites.

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The annual reports consist of the properly coded NEPS point source records (coding forms, punched cards, or magnetic tape) for any facility which has actual emissions of more than 100 tons per year of particulates, sulfur oxides, nitrogen oxides, or hydrocarbons, or more than 1000 tons per year of carbon monoxide and also meets any of the following conditions:

- a. A source achieves compliance at any time within the reporting period with any regulation of an applicable plan.
- b. A new or modified source receives approval to construct during the reporting period or begins operating during the reporting period.
- c. A source ceases operation during the reporting period.
- d. A sources' emissions have changed more than 5 percent from the most recently submitted emissions data.

If as determined by the State and the Regional Administrator, the emissions from any point source have not changed by more than 5 percent from the most recently submitted emissions data, the State shall update the year of record of the previously reported data.

The annual reports must be submitted by July 1 of each year to reflect actions which took place during January 1 to December 31 of the previous year.

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2. Conducts minimal/minor programming activities for file maintenance and special data retrievals (supplies documentation of any/all changes and additions to SDS).
3. Maintains records of computer and terminal utilization and access/retrieval from data banks; prepares on this subject as required.
4. Is responsible for all data transfer to and from other systems as required.
5. Provides all necessary effort to maintain the computerized systems of NADB, following complete documentation by SDS.
6. Conducts data processing operations associated with Edit/Validation/Verification/Certification, except computer systems design and programming.
7. As OAQPS ADP Coordinator serves as the single point of contact in all ADP matters as necessary, including policy guidelines, training, meetings and direction at the NCC facility.
8. Serves as the main point of contact to resolve regional offices ADP problems and/or issues. Develops operational timetables and coordinates available assistance to provide and ensure the timely and efficient storage and retrieval of AEROS data.